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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/864,965	05/24/2001	Edward J. Friery	14126	3462
7590	11/19/2004		EXAMINER	
Sally J. Brown Autoliv ASP, Inc. 3350 Airport Road Ogden, UT 84405			LUK, EMMANUEL S	
			ART UNIT	PAPER NUMBER
			1722	

DATE MAILED: 11/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/864,965

**Applicant(s)**

FRIERY, EDWARD J. S.C.

**Examiner**

Emmanuel S. Luk

**Art Unit**

1722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7,9-21,23 and 29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7,9-21,23 and 29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
3. Claims 1-5, 7, 9-19 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petty et al (5332270) in view of Moumdjian (5112560) and Nolan (4519569).

Petty teaches an injection mold die having a window mold member (30) projecting from a surface (29) that defines a window, the window mold member is configured to separate the wall of the piece being molded from the surface when the molded piece and mold are separated (Fig. 6A-6C), the core forms the U-shaped cut-out (17), the top of the window member being flat. An opening is also formed on the product (1). Petty also teaches a mandrel (33) that functions as the inner core to form

the molded product. The prongs of the U-shape are the 'ramps' in Petty can be considered parallel.

Nolan fails to teach the member on an inner core member and a boss.

Nolan teaches an inner core (12) containing projections (Fig. 7) for forming a cap having where the projections form the line of weakness (52) that is adapted to snap over a shoulder on the bottle neck (Col. 2, lines 56-60) to form the tamper-indicating portion that is torn off from use. The projections are ramped in shape.

Moumdjian teaches bosses (14) located on a die member (10). In regards to the boss, it would have been obvious to one of ordinary skill to place a boss between the ramps of the window mold member to form the opening. In regards to the boss, Petty teaches an opening (14) formed in the product. It would have been obvious to one of ordinary skill in the art to have a boss on the mold core to form the opening in the product. Both Petty and Nolan teach projections such that the product from the inner core side will be ramped.

It would have been obvious to one of ordinary skill in the art to modify Petty with a window mold member (or projection) on the inner mold core as taught by Nolan because it would allow for improved removal of the product from the inner mold core.

In regards to the plurality of window mold members, this is merely duplicate parts with merely a multiplied effect of forming a plurality of windows simultaneously. It would have been obvious to one of ordinary skill in the art to modify Petty with a plurality of window mold members because it merely provides a multiplied effect. In re Harza, 124 USPQ 378 (CCPA 1960).

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Petty et al (5332270) in view of Moumdjian (5112560) and Nolan (4519569) as applied to claims 1-5, 7, 9-19 and 29 above, and further in view of Nakamura.

Nolan teaches the claimed apparatus as shown above. Nolan fails to teach metal molds.

Nakamura teaches an injection metal mold, wherein synthetic resin material is poured into a metal mold body in which a slide core different from a core of the metal mold body is projected to a lower edge portion of an article to be molded (Col. 1, lines 6-11).

It would have been obvious to one of ordinary skill in the art to modify Nolan with the mold materials to be made from metal as taught by Nakamura because it provides a strong material that will not deform during mold operations.

5. Claims 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petty et al (5332270) in view of Moumdjian (5112560) and Nolan (4519569)

Petty teaches an injection mold die having a window mold member (30) projecting from a surface (29) that defines a window, the window mold member is configured to separate the wall of the piece being molded from the surface when the molded piece and mold are separated (Fig. 6A-6C), the core forms the U-shaped cut-out (17), the top of the window member being flat. An opening is also formed on the product (1). Petty also teaches a mandrel (33) that functions as the inner core to form

the molded product. The prongs of the U-shape are the 'ramps' in Petty can be considered parallel.

Nolan fails to teach the member on an inner core member and a boss.

Nolan teaches an inner core (12) containing projections (Fig. 7) for forming a cap having where the projections form the line of weakness (52) that is adapted to snap over a shoulder on the bottle neck (Col. 2, lines 56-60) to form the tamper-indicating portion that is torn off from use. The projections are ramped in shape.

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It would have been obvious to one of ordinary skill in the art to modify Petty with a window mold member (or projection) on the inner mold core as taught by Nolan because it would allow for improved removal of the product from the inner mold core.

In regards to the plurality of window mold members, this is merely duplicate parts with merely a multiplied effect of forming a plurality of windows simultaneously. It would have been obvious to one of ordinary skill in the art to modify Petty with a plurality of window mold members because it merely provides a multiplied effect. In re Harza, 124 USPQ 378 (CCPA 1960).

***Response to Arguments***

6. Applicant's arguments with respect to claims 1-7, 9-21, 23 and 29 have been considered, however a new rejection has been made. The applicants argue the combination of the references and in particular the pair of ramps and a boss between the ramps. Here, however, Petty teaches the ramping of the projection which in combination with Nolan would have the same ramped portions and also Petty teaches the opening which would be created by a boss. The applicant has again discussed about the line of weakness formed by the projection. However, the projection need not circumscribe the internal core, additionally, Petty teaches that it is known to use projections on an inner core. The question of the ramps in relation to the U-shaped window member of Petty and its functionality is noted, however, the claims themselves do not specifically specify the position of the ramps on the U-shaped window member.

In regards to the boss, Petty teaches the opening which would be formed by a boss since it would be between the two projections and ramps. Again, applicant's arguments concerning the separation function is noted, that is a functionality argument which does not give further weight in an apparatus claim.

In regards to the metal mold, Nakamura teaches the concept of having molds designed from metals. The rejection remains since Petty and Nolan teaches the all the claim limitations as recited in claim 6.


**Conclusion**

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emmanuel S. Luk whose telephone number is (571) 272-1134. The examiner can normally be reached on Monday-Thursday 7 to 4 and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ben Utech can be reached on (571) 272-1137. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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